C-3

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N	AK0021385	170710	C	R	1

Remarks

21 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 10 69	70	71	72	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Municipality of Haines - Wastewater Treatment Plant
229 Fair Drive, Haines, AK 99827

Entry Time/Date	Permit Effective Date
9am / 7/10/17	December 24, 2001
Exit Time/Date	**Permit Expiration Date**
12:35pm / 7/10/17	December 26, 2006

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

Scott Bradford, Water-Sewer Plant Operator
Phone: 907-766-2200, Fax: 907-766-2716
Email: sbradford@haines.ak.us

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

SIC: 4952 - Sewerage Systems
NAICS: 221320 - Sewage Treatment Facilities

CWA 301(h) facility

Name, Address of Responsible Official/Title/Phone and Fax Number

Scott Bradford, Haines Borough, Water-Sewer Plant Operator
P.O. Box 1209, Haines, AK 99827
Phone: 907-766-2200, Fax: 907-766-2716
Email: sbradford@haines.ak.us

Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

✓ Permit	✓ Self-Monitoring Program	☐ Pretreatment	☐ MS4
✓ **Records/Reports**	☐ Compliance Schedules	☐ Pollution Prevention	
✓ Facility Site Review	✓ Laboratory	☐ Storm Water	
✓ Effluent/Receiving Waters	✓ Operations & Maintenance	☐ Combined Sewer Overflow	
✓ Flow Measurement	✓ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes SEV Description

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Matt Vojik	EPA /OCE / 206-553-0716	7/17/2017
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
	EPA/OCE/MRE 3-0955	2/16/18

EPA Form 3560-3 (Rev 1-06) Previous editions are obsolete.

ICIS.
8-17-2017

INSTRUCTIONS

Section A: National Data System Coding *(i.e., PCS)*

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. *(Use the Remarks columns to record the State permit number, if necessary.)*

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A Performance Audit
B Compliance Biomonitoring
C Compliance Evaluation (non-sampling)
D Diagnostic
F Pretreatment (Follow-up)
G Pretreatment (Audit)
I Industrial User (IU) Inspection
J Complaints
M Multimedia
N Spill
O Compliance Evaluation (Oversight)
P Pretreatment Compliance Inspection
R Reconnaissance
S Compliance Sampling
U IU Inspection with Pretreatment Audit
X Toxics Inspection
Z Sludge - Biosolids
Combined Sewer Overflow-Sampling
$ Combined Sewer Overflow-Non-Sampling
+ Sanitary Sewer Overflow-Sampling
& Sanitary Sewer Overflow-Non-Sampling
\ CAFO-Sampling
= CAFO-Non-Sampling
2 IU Sampling Inspection
3 IU Non-Sampling Inspection
4 IU Toxics Inspection
5 IU Sampling Inspection with Pretreatment
6 IU Non-Sampling Inspection with Pretreatment
7 IU Toxics with Pretreatment
! Pretreatment Compliance (Oversight)
@ Follow-up (enforcement)
{ Storm Water-Construction-Sampling
} Storm Water-Construction-Non-Sampling
: Storm Water-Non-Construction-Sampling
~ Storm Water-Non-Construction-Non-Sampling
< Storm Water-MS4-Sampling
- Storm Water-MS4-Non-Sampling
> Storm Water-MS4-Audit

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A — State (Contractor)
B ---- EPA (Contractor)
E — Corps of Engineers
J — Joint EPA/State Inspectors—EPA Lead
L ---- Local Health Department (State)
N — NEIC Inspectors
O— Other Inspectors, Federal/EPA (Specify in Remarks columns)
P— Other Inspectors, State (Specify in Remarks columns)
R — EPA Regional Inspector
S — State Inspector
T — Joint State/EPA Inspectors—State lead

Column 20: Facility Type. Use one of the codes below to describe the facility.

1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
2 — Industrial. Other than municipal, agricultural, and Federal facilities.
3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
4 — Federal. Facilities identified as Federal by the EPA Regional Office.
5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

NPDES Inspection Report

Permit # AK0021385

Municipality of Haines
Wastewater Treatment Plant

Haines, AK

July 10, 2017

Prepared by:

Matt Vojik
Environmental Protection Agency (EPA), Region 10
Office of Compliance and Enforcement (OCE)
Multimedia Inspection & RCRA Enforcement Unit (MIREU)

Contents

(Unless otherwise noted, all details in this inspection report were obtained from conversations with Mr. Scott Bradford or from observations during the inspection.)

I. Facility Information

Facility Name:	Municipality of Haines Wastewater Treatment Plant
Facility Owner/Operator:	Municipality of Haines
Physical Address:	229 Fair Drive, Haines, AK 99827
Lat/Long:	59.233504°, -135.458520°
Mailing Address:	P.O. Box 1209, Haines, AK 99827
NAICS Code: SIC Code:	221320 - Sewage Treatment Facilities 4952 - Sewerage Systems
Facility Contacts:	Scott Bradford, Water-Sewer Plant Operator Phone: 907-766-2200 Fax: 907-766-2716 Email: sbradford@haines.ak.us Dennis Durr, Wastewater Operator
Permit Number:	AK0021385
Receiving Water:	Portage Cove (Chilkoot Inlet)

II. Inspection Information

Inspection Date:	July 10, 2017
Inspectors:	Matt Vojik, Inspector EPA Region 10, OCE / MIREU Phone: 206-553-0716
Arrival Time:	9:00 AM
Departure Time:	12:35 PM
Weather:	Overcast

Purpose: To determine whether the facility is in compliance with their National Pollutant Discharge Elimination System (NPDES) permit and the Clean Water Act (CWA).

III. Permit Information

This facility is permitted under NPDES permit AK0021385. The permit became effective on December 24, 2001 and has been administratively extended since the expiration date of December 26, 2006. The wastewater treatment plant (WWTP) operates under a CWA Section 301(h) waiver to discharge effluent after primary treatment.

IV. Background

The WWTP serves a population of approximately 1,800 residents. The wastewater treatment process consists of influent screens, a grit chamber and clarifier. Untreated influent is pumped from the collection system to the WWTP in batches. Treated effluent flows via gravity to a submerged outfall located approximately one mile east of the facility and 1,700 feet from the shoreline in Portage Cove. Sludge is treated via aerobic digestion and a belt press before being hauled off-site to be composted. According the facility's 2016 Annual Report, there are no industrial dischargers within the Haines Borough.

The facility was last inspected for NPDES permit compliance on August 27, 2015 by the EPA.

V. Inspection Chronology

This was an announced inspection. On July 5, 2017, I called the WWTP and made arrangements to meet on the day of the inspection.

I arrived at the facility at 9am on July 10, 2017. I presented my credentials to Mr. Scott Bradford and provided him an EPA Small Business Resources Information Sheet. I was accompanied throughout the inspection by facility representatives. I was not denied access to the facility.

I began the inspection with a brief opening conference with Mr. Bradford and Mr. Dennis Durr. After taking a tour of the WWTP, I visited the on-site laboratory and conducted a file review. We ended with a closing conference to discuss observations and next steps.

VI. Opening Conference

The WWTP staff consists of Mr. Bradford and Mr. Durr, Class II wastewater treatment operators, who have worked at the facility for 30 years and 12 years respectively. Mr. Bradford said that he has plans to retire in 2019.

The WWTP building was being reconstructed and did not have walls at the time of the inspection. Mr. Bradford expected this phase of the renovation project to be completed by the end of August. Additional planned upgrades included the installation of a new bio-heater, grinder influent screen, screw sludge press and magnetic flow meter. The facility has also considered replacing influent float pumps with variable speed pumps that would maintain continuous influent flow.

Mr. Bradford said that the population decreases by approximately 10 percent during the winter, but inflow and infiltration of snowmelt and rainfall cause spikes in flow during the winter months. Maximum actual daily flows can exceed 1 million gallons per day (MGD), but remain below the permitted daily maximum limit of 2.9 MGD.

VII. Site Review

Mr. Bradford took me on a tour of the WWTP. A treatment flow chart and outfall map appear in **Attachment A** and a photograph log appears in **Attachment B**.

I inspected the influent pump room, rotating influent screens (**Photo 1**). I continued to the clarifier, which is surrounded by the sludge digester (**Photo 2**) and equalization chambers. Digested sludge is processed with a belt press on a weekly basis in the summer and approximately one or two times per month in the winter. Pressed sludge is composted offsite by Community Waste Solutions, a private local company.

I also inspected the effluent composite sampler (**Photo 3**), grab sampling point (**Photo 4**), grab sample scoop (**Photo 5**) and leftover composite samples of influent and effluent (**Photo 6**). I asked why the treated effluent sample looked similar to the untreated influent sample. Mr. Durr said that the treated effluent tends to appear darker in the summer, when the WWTP receives deliveries of septage. He said that this concentrated wastewater is deposited from pump trucks into a 3,000-gallon holding tank and then released to the headworks incrementally to avoid overloading the WWTP.

I visited the on-site laboratory, where the facility analyzes wastewater samples. Mr. Bradford said that with the exception of the pH and dissolved oxygen meters, the facility has used the same laboratory equipment since he started working at the facility 30 years ago. The laboratory undergoes an annual quality assurance review by ERA. Mr. Bradford also said that the facility replaces the pH probe on an annual basis.

I also inspected the receiving water monitoring locations and the location of the discharge pipe, which had recently been rerouted to accommodate a boat harbor expansion project (**Photo 7**).

The facility is equipped with a manually operated back-up power generator. Mr. Bradford said that the local police department also receives notifications of WWTP power outages and high-level alarms at wastewater lift stations.

VIII. File Review

I reviewed the following records:

- Discharge Monitoring Reports (DMRs), Monitoring Records, Bench Sheets, Pump Logs (**Attachment C**) and Calibration Records (**Attachment D**)
- Operation and Maintenance (O&M) Manual dated July 2009
- Quality Assurance Plan (QAP), revision 1.3, dated August 21, 2009 (**Attachment E**)
- Annual Report for 2016 (**Attachment F**)

IX. Areas of Concern

I noted the following areas of concern:

A. Surface Water Monitoring Locations

Section I.B.4.b. of the permit states that fecal coliform samples "must be collected at a minimum of four locations: on the North, East, and South edges of the mixing zone, and one shoreline sample within the mixing zone."
AND
Footnote 1 in Table 3 of Section I.B.4. of the permit states that "the mixing zone for fecal coliform bacteria is defined as an arc of a circle of 1600 meter radius, centered on the outfall going from one shoreline to the other."
AND
Section I.B.4.c. of the permit states that monitoring of fecal coliform shall be reported on the annual report, which shall include "a narrative description of the sampling procedures and locations" and "a map of the sampled locations that also shows the outfall and ZID."

Based on the surface watering monitoring practices described during the inspection, the facility monitors fecal coliform from the cruise ship dock located southwest of the outfall and at four shoreline sites located to the north, northwest, southwest and southeast of the outfall, as depicted on the outfall map in **Attachment A**. The facility does not sample along the edge of the mixing zone from the northern shoreline site (Garbage Point) to the southeastern shoreline sampling site (Last Hydrant). Sampling along this arc would require the use of a boat, but Mr. Bradford said that the facility has not used a boat for receiving water monitoring since they stopped monitoring the other parameters in Table 3 of the permit, which were no longer required after 2006.

I also noted that the receiving water sampling points are listed in the 2016 Annual Report (**Attachment F**), but the annual report does not include a map or narrative description of the sampling procedures and locations per Section I.B.4.c. of the permit. (The outfall map in **Attachment A** was obtained from the DMR submittal for November 2015, not an annual report.) Failure to include sampling maps in annual reports was also identified in a notice of violation issued to the facility on February 17, 2016.

B. Effluent Flow Measurements

Table 2 in Section I.B.3. of the permit specifies that flow shall be continuously recorded.
AND
DMRs have been certified to be "true, accurate, and complete" in accordance with Section IV.E.5. of the permit.
AND
Section II.A. of the permit states that "measurements shall be representative of the volume and nature of the monitored discharge."

Mr. Bradford said that the facility been without a flow meter since May 2017. Since that time, the facility has calculated flow based on influent pump times and pump capacity. I was not able to verify the accuracy of this flow measurement method. Mr. Bradford said that the facility plans to install a new magnetic flow meter as part of on-going upgrades to the facility.

C. Timed Composite Samples

Table 2 in Section I.B.3. of the permit specifies "24-hour composite" as the required sample type for multiple parameters.
AND
Section I.I.19. of the permit states that "a '24-hour composite' sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots."
AND
Section II.A. of the permit states that "measurements shall be representative of the volume and nature of the monitored discharge."

Mr. Bradford said that the facility does not collect flow proportional composite samples. Instead, the composite samplers collect one 100mL sample per hour over a 24-hour period. Failure to collect flow proportional composite samples was also identified as an area of concern during an EPA inspection of the facility in 2010.

D. Monitoring Records – Time of Day

Section II.E.1. of the permit states that records of monitoring information shall include the "time of sampling or measurements."

Mr. Bradford said that since May 2017, the facility has calculated daily flow based on influent pump times and pump capacity. He said that influent pump recordings are taken at approximately the same time each day to ensure that the calculated daily flow corresponds to a 24-hour interval. However, I noted that the time of each pump recording was not documented on the facility's sewer plant pump log. I also noted that the time of measurements were not recorded on the facility's bench sheets for sample analysis. An example pump log and bench sheet appear in **Attachment C**.

E. Flows Used to Calculate Loadings

Section I.I.6. of the permit states that "'daily discharge' means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations

expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day.'
AND
Section I.I.1. of the permit states that "'average monthly discharge limitation' means the highest allowable average of 'daily discharges' over a calendar month, calculated as the sum of all 'daily discharges' measured during a calendar month divided by the number of 'daily discharges' measured during that month."
AND
Section 11.c. on page 19 of the NPDES Self-Monitoring System User Guide (EPA-830-B-85-100) states that "daily flow and concentration are used in calculating loadings."

During the inspection, I noted that the facility used the average monthly flow to calculate monthly average mass loadings and maximum daily flow for the month to calculate maximum daily loading. I advised the facility to calculate daily loading (or "daily discharge" as defined in Section I.I.6. of the permit) with the daily flow measured on the day of sampling. Average monthly loadings should then be an average of daily loadings calculated during the month. If only one daily loading is measured during a month, then the average monthly loading would be equivalent to the maximum daily loading for that month.

F. Quality Assurance Requirements for Copper Monitoring
Section I.G.1. of the permit states that the permittee shall develop a Quality Assurance Plan "to assist in planning for the collection and analysis of samples in support of the permit."
AND
Table 2 in Section I.B.3. of the permit specifies a monitoring requirement for copper with a sample frequency of "1/quarter."

After the inspection, I noted that the QAP (**Attachment E**) described quality assurance requirements for the collection and analysis of samples for all required effluent parameters except copper.

G. Calibration Records
Section II.F. of the permit states that "the permittee shall retain records of all monitoring information, including all calibration and maintenance records."

During the inspection, I noted that the calibration logs for the lab scale, pH meter, fecal bath incubator and drying oven were sporadically maintained (**Attachment D**). For instance, Mr. Bradford said that the facility calibrates the laboratory scale a couple of times per year, but the scale calibration log showed no record of calibrations in 2016.

H. Proper Operation and Maintenance
Section III.E. of the permit states that "the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed, or used, by the permittee to achieve compliance with

the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures."
AND
Section II.A. of the permit states that "measurements shall be representative of the volume and nature of the monitored discharge."

In addition to the incomplete calibration records described in Section IX.G. above, I made the following observations regarding the operation and maintenance of equipment, which could affect laboratory controls, quality assurance procedures and the representativeness of measurements:

- Discolored Effluent Composite Sampler Tube – I noted that effluent composite sample collection tube appeared dirty (**Photo 3**) at the time of the inspection. I asked Mr. Durr if the facility has a procedure for maintaining this tube and he said the tubes are replaced "when they fail."
- Infrequent pH Meter Calibration – Although the permit calls for weekly pH monitoring, Mr. Bradford estimated that the facility calibrates the pH meter "every month or two." I advised the facility to calibrate the pH meter before each use or double-check the manufacturer's instructions for a specific calibration frequency.

X. Closing Conference

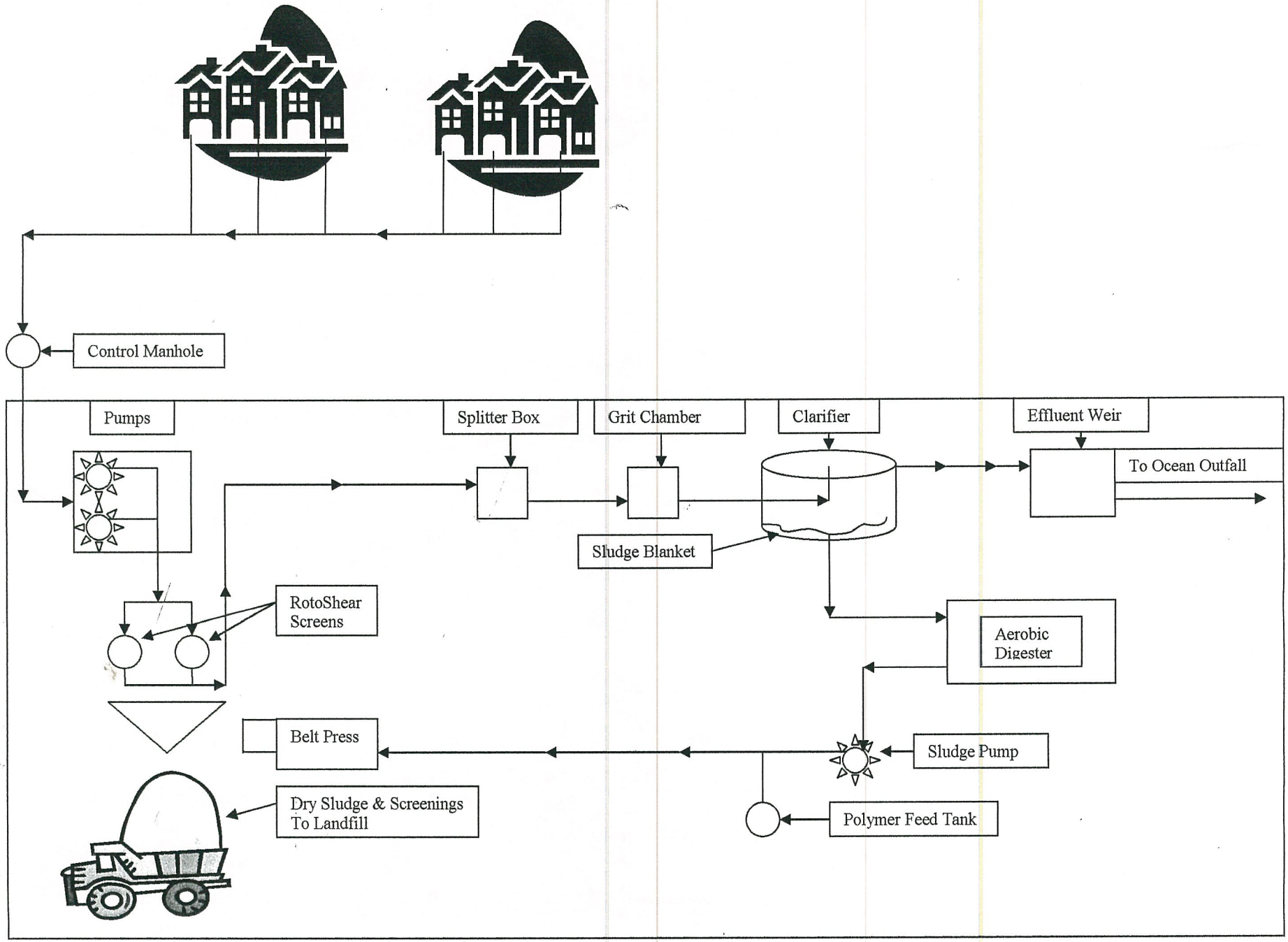
I held a closing conference with Mr. Bradford. We discussed the areas of concern identified during the inspection and I gave a brief overview of the post-inspection process. I thanked him for his time and assistance.

Report Completion Date: 2/13/2018

Lead Inspector Signature:

ATTACHMENT A – WWTP Flow Chart and Outfall Map

Haines Borough Sewer Plant Flow Chart



#AK-002138-5

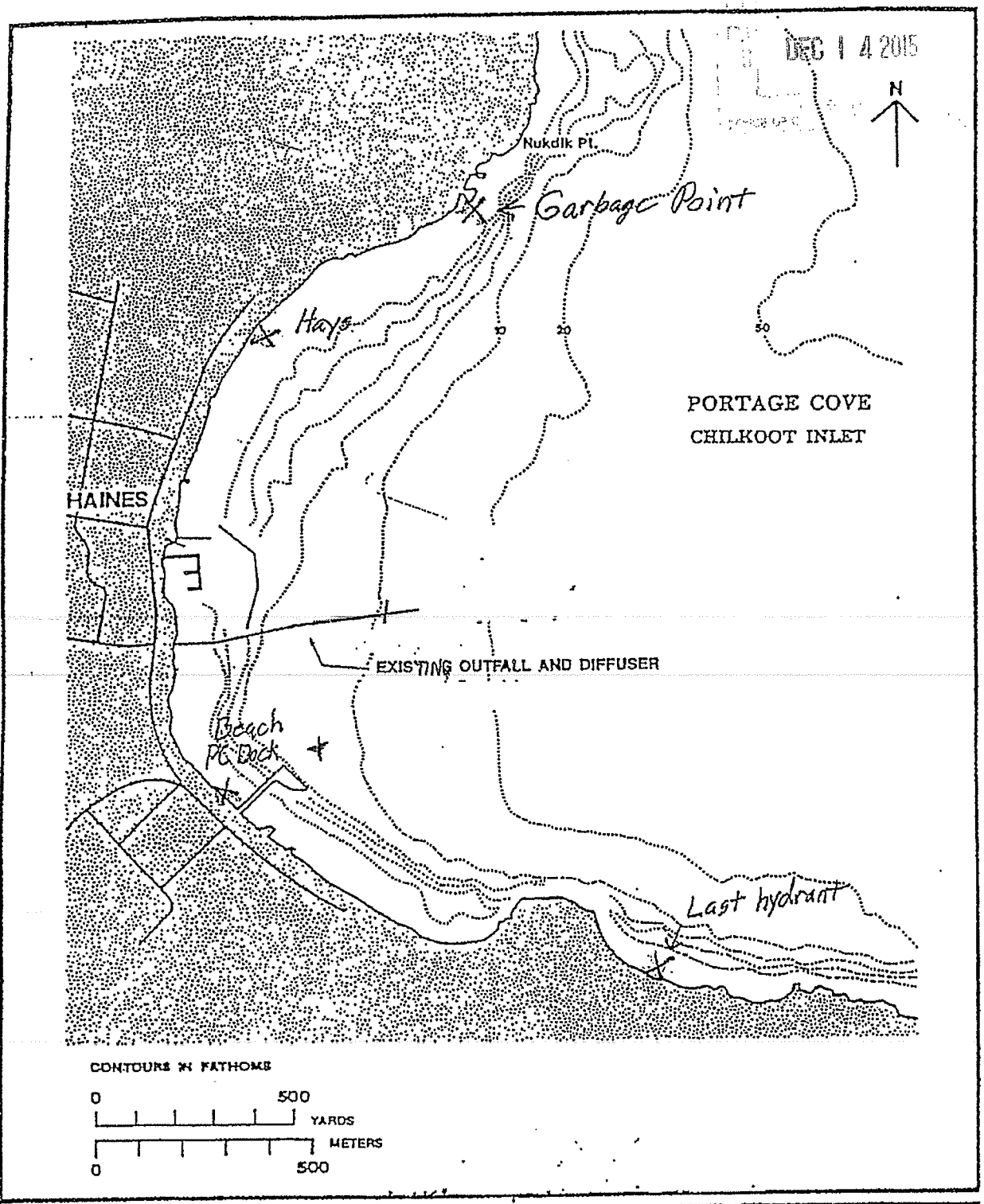


Figure 3. Location of the existing outfall for the City of Haines Wastewater Treatment Facility.

ATTACHMENT B – Photograph Log

(Photographs were taken by Matt Vojik on July 10, 2017 with a Panasonic DMC-FH25 camera.)

Note: The camera was not set to local time during the inspection. The actual times were one hour earlier than the time indicated on the electronic photograph files.

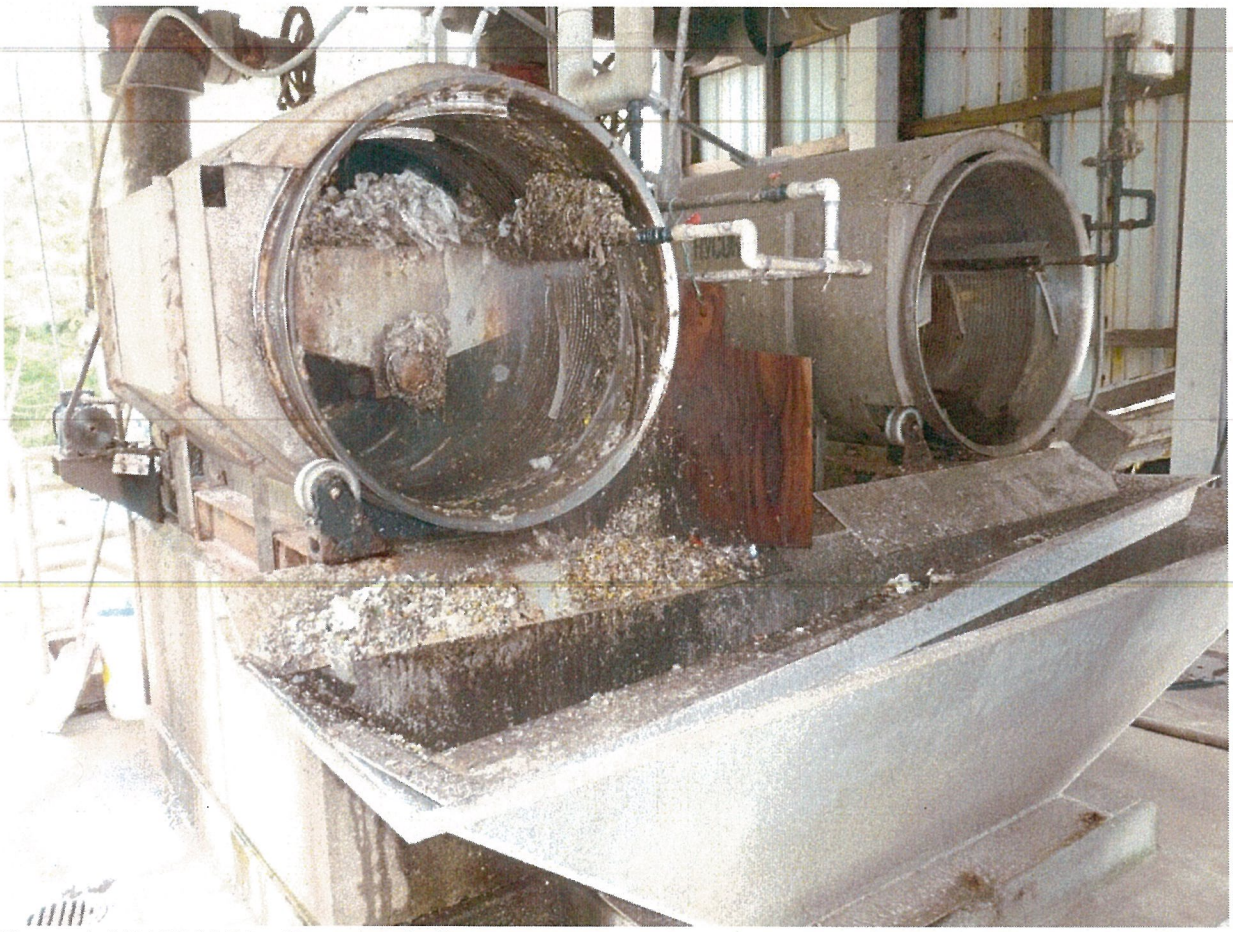


Photo 1 / P1030354 – Rotating influent screens

Photo 2 / P1030359 – Clarifier (center) and digester (left)

Photo 3 / P1030361 – Effluent composite sampler

Photo 4 / P1030362 – A standpipe, indicated by a yellow arrow, which serves as the effluent grab sampling point

Photo 5 / P1030363 – Effluent grab sample scoop

Photo 6 / P1030353 – Leftover composite samples of influent (left) and effluent (right). This is a cropped version of the original photo.

Photo 7 / P1030371 – Easterly view of the location of the outfall. Dredged soil from a boat harbor expansion project appears in the foreground.

ATTACHMENT C – Pump Log and Bench Sheets for April 2017

April 2017

Sewer Plant Pump Log					
Date	Pump 1		Pump 2		Chart recorder
pre	46399.8		53500 6		
M 1	46407.6		53507 8		
S 2	46413.8		53512.5		
M 3	46418.7		53517.2		
A 4	46424.1		53522.5		
A 5	46428.8		53529.9		
A 6	46432.9		53538.4		
A 7	46438.0		53543.4		
R 8	46443.1		53548.3		
M 9	46447.3		53552.5		
M 10	46451.0		53555 7		
M 11	46455.1		53559.7		
M 12	46459.3		53563 8		
A 13	46463.5		53567.5		
M 14	46467.5		53571.5		
R 15	46472.4		53576.3		
A 16	46476.2		53579.8		
A 17	46479.8		53583.5		
R 18	46483.7		53587.3		
M 19	46487.3		53590.7		
M 20	46491.0		53594.0		
R 21	46494.5		53597.6		
S 22	46498.3		53601.1		
R 23	46502.0		53604.7		
M 24	46505.5		53608.1		
R 25	46508.2		53610.7		
A 26	46511.8		53614.2		
M 27	46515.4		53617.7		
M 28	46519.1		53621.4		
M 29	46523.0		53625.2		
A 30	46526.4		53628.6		
31					

HAINES BOROUGH
WASTEWATER TREATMENT BENCH SHEET

April 2017

Total Suspended Solids

Influent TSS

Initials	Date	Mls Sample	Tare #	Dry #	TSS Mg/L
M	4/7	100	1456	.1475	19
M	4/19	100	.1460	.1535	75
M	4/26	100	.1421	.1631	210
M	4/30	100	.1433	.1537	104
				Avg.	

Effluent TSS

Initials	Date	Mls Sample	Tare #	Dry #	TSS Mg/L
M	4/7	100	.1472	.1476	4
M	4/19	100	.1449	.1485	36
M	4/26	100	.1465	.1558	93
M	4/30	100	.1427	.1485	58
				Avg.	
				Total	

TSS, Mg/l =(Dry # - Tare #) /Mls Sample x 1,000,000

Initials	Date	Temp	pH	DO	CU
M	4/7	5.6	7.66	9.15	
M	4/14	6.5	7.14	9.42	
M	4/21	6.0	7.43	9.11	
M	4/26	8.8	7.93	8.05	
	Avg.				

Fecals Initials M Date 4/19/17 @ 12:45

~~1/1,000~~ 1/10,000	620,000
Blank 1	0
~~1/5,000~~ 1/10,000	
~~Blank 2~~	
1/10,000	
Blank	
Garbage Pt	
Blank	
Hay's Beach	
Blank	
P.C. Dock	
Blank	
P.C. Beach	
Blank	
Last Hydrant	
Blank	
Other	

Coliform Colonies x 100 / Mls of Sample Filtered = # of Fecals

Biological Oxgen Demand (BOD)

Influent BOD

Initials MS Date In 4/18 Date Out 4/23

Bottle #	Mls Sample	Initial DO	Final DO	Depletion	BOD Mg/L
8	BLANK	9.81	9.45		
11	10	9.81	7.23	2.58	77
12	10	9.81	7.35	2.46	74
14	13	9.76	6.84	2.92	67
15	13	9.73	6.32	3.41	78
				Avg.	74

(Initial DO - Final DO = Depletion) x 300 / Sample = BOD Mg/L

Effluent BOD

Initials MS Date In 4/18 Date Out 4/23

Bottle #	Mls Sample	Initial DO	Final DO	Depletion	BOD Mg/L
26	18	9.76	7.27	2.49	41.5
28	18	9.73	6.98	2.75	46
34	25	9.66	6.76	2.90	36
47	25	9.65	6.77	2.88	35
				Avg.	41

Influent BOD _____ - Effluent BOD ____/ Influent BOD _____ = % Removal 46%

Operator _____ Date _____

ATTACHMENT D – Calibration Logs

VOLAND SCALE

Date	Calibrate	
8-24-04	yes	cleaned, √ using weights,
12-9-04	yes	Cleaned w/ Air, Check w/ weights
10/27/05	yes	
8/4/06	Yes	
12/21/06	Yes	Cleaned w/Air Check w/ weights
5/22/07	Yes	
5/11/07		Cleaned w/ Air
8/03/07	Yes	Cleaned w/ Air
4/25/08		Cleaned w/ Air
7/07/08	Yes	Cleaned w/ Air Checked w/ weights
11/14/08	Yes	Cleaned w/ Air
4/09/09	Yes	Checked w/ weights
10/30/09	Yes	Checked w/ weights
4/07/10	Yes	Checked w/ weights
6/10/2010	Yes	Checked w/ 10 mg Weight
11/29/2010	Yes	Checked w/ 1 gram Weight
6/8/2011	Yes	Check with weights
11/22/2011	Yes	Checked w/ weights
6/7/12	yes	Checked w/ weights
6/20/13	Yes	Calibrated w/ weights
6/9/14	Yes	Cal w/ weights
8/18/15	Yes	Cal w/weights
6/13/17	Yes	Cal w/weights

ORION pH METER MODEL 290

Date	Calibrate	Probe	Comments
7/28/11	Yes		
10/21/11	Yes		New Batts
1/13/12	Yes		New Batts
4/30/12	Yes		
6/11/12	Yes		Calibrated with 2 Standards
10/17/12	Yes		Calebrated W/ 2 Standards
12/13/12	Yes		New Batts 100
2/20/13	Yes		New Batt 1st
4/5/13	Yes		New Batt 2 Standards
6/20/13	Yes		New Batt 2 Standard
7/30/13			New Ptl Meter
8/15/13	Yes		
10/22/13	Yes		"
4/4/14	Yes		"
5/20/14	Yes	New	New Probe & Meter
2/24/15	Yes		"
4/20/15	Yes		"
6/16/15	Yes		"
8/7/15	Yes		"
8/19/15	Yes		"
1/10/16	Yes		"
3/29/16	Yes		"
5/18/16	Yes		"
10/21/16	Yes		"
12/6/16	Yes		"
4/26/17	Yes	New	"
6/13/17	Yes		"
6/30/17	Yes		"

WATER BATH INCUBATOR

Date	Temp 44.5C° +/- .2°	Comments
6/11/12	44.5	@ 13:00 Added Distilled Water
6/12/12	44.5	@ 7:00
8/28/12	44.5	@ 14:00
11/14/12	44.5	@
12/17/12	44.5	@ 13:30 RO
1/15/13	44.5	@ 11:00 RO
12/26/13	44.5	@ 12:30 RO
4/4/14	44.5	@ 13:00 RO
5/21/14	44.5	@ 12:30 RO
8/5/14	44.5	@ 10-15 RO
9/26/14	44.5	@ 11:45 RO
10/30/14	44.5	@ 11:00 RO
11/11/14	44.5	@ 15:30 RO
2/24/15	44.5	@ 7:00 RO
4/18/15	44.5	@ 13:45
6/29/15	44.5	@ 14:00
7/24/15	44.5	@ 13:00
8/7/15	44.5	@ 13:30
9/17/15	44.7	@ 7:00
12/23/15	44.5	@ 11:20 am RO
3/28/16	44.5	@ 11:45 RO
4/26/16	44.5	@ 7:15 RO
5/18/16	44.5	@ 10:00 RO
8/30/16	44.5	@ 7:15 RO
9/23/16	44.5	@ 7:00 am RO
10/28/16	44.5	@ 14:00 RO
11/31/16	44.5	@ 11:45 RO
12/20/16	44.5	@ 7:30 RO
5/24/17	44.5	@ 13:00 RO
6/13/17	44.5	@ 9:00 RO
6/26/17	44.5	@ 8.00 RO

DRYER

Date	Temp Range 104°C +/- 2°	
6-7-2012		
[illegible]	104	
7/15/2010	103°	
7/23/10	102°	
8/17/10	103°	
9/2/10	103°	
10/15/10	108°C	
11/03/10	105°	RD
12/24/10	106°	RD
12/22/10	105°	
2/17/11	103°	RD
3/5/11	104°	RD
5/[illegible]	[illegible]	RD
7/11/11	105°	RD
11/8/12	105°	RD
11/6/13	105°	RD
10/29/13	105°	RD
4/[illegible]/15	103°	RD
5/12/14	103°	RD
10/31/14	103°	RD
12/2/14	105°	RD
2/22/15	104°	RD
8/7/15	103.5	RD
8/19/15	104	RD
8/28/15	102°	RD
10/21/15	105°	RD
1/21/15	104°	RD
3/28/15	105°	RD
4/25/16	104	RD
8/31/16	102.5	RD
9/23/16	103°	RD
11/3/16	104°	RD
5/27/17	105°	RD
6/13/17	105°	RD
6/26/17	105°	RD

ATTACHMENT E – Quality Assurance Plan dated August 21, 2009

Haines Borough

Wastewater Treatment Facility

Quality Assurance Plan

Section A: Project Management

A1. Approvals

This Quality Assurance Plan (QAP) is approved as part of the attached wastewater permit.

Haines Borough Project Manager Signature	Date
Haines Borough Quality Assurance Officer Signature	Date
EPA Quality Assurance Officer Signature	Date

A2. Table of Contents

Section A: Project Management

SECTION B: DATA GENERATION AND ACQUISITION

SECTION C: ASSESSMENT AND OVERSIGHT

SECTION D: DATA VALIDATION AND USABILITY

A3. Distribution List

This QAP will be provided to all those responsible for permit implementation, including the Haines Borough Project Manager and Quality Assurance (QA) Officer. It will remain attached to and be distributed with copies of the wastewater permit.

A4. Project/Task Organization

Duties and responsibilities of key individuals are listed below:

Haines Borough Project Manager – Responsible for the implementation of permit and certification requirements.

Haines Borough Quality Assurance (QA) Officer – Responsible for QA/QC of all self-monitoring required under the permit.

Laboratory Project Manager – Responsible for water quality analysis.

Laboratory QA Officer – Responsible for QA/QC of water quality analyses under federal and state certification.

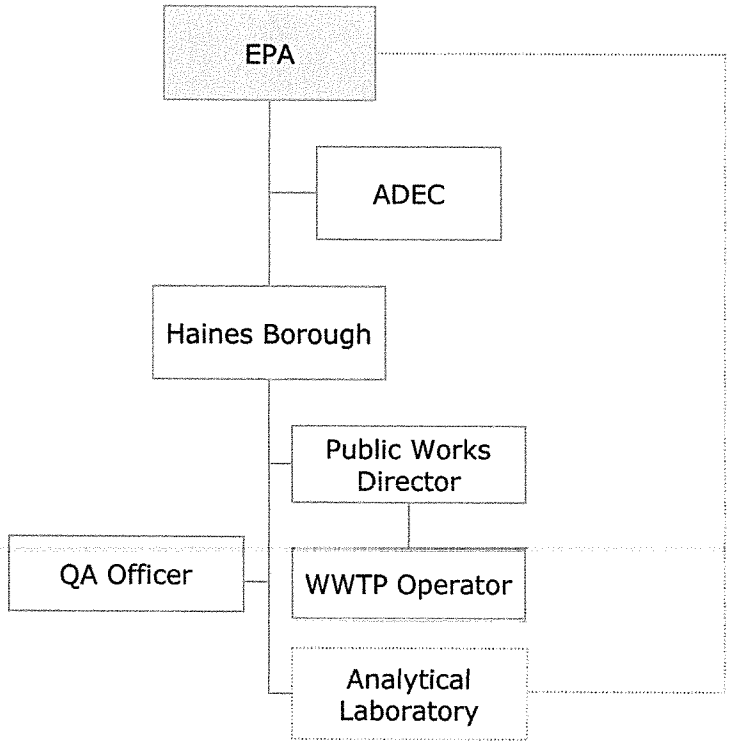
ADEC Project Manager –. Courtesy contact regarding compliance issues. Haines Borough has a 301(h) exemption which gives the EPA primacy over the State for this facility.

ADEC –May review data or audit permittee's monitoring activities.

EPA Quality Assurance Officer – NPDES permit development and approval. Primary contact regarding permit and monitoring requirements. Receives discharge monitoring reports (DMRs). Reviews and approves this QAP.

The project organizational structure is represented on the next page in Figure 1.

Haines Borough Wastewater Treatment Facility
Figure 1: Organizational Chart



A5. Problem Definition/Background

This QAP ensures that data collected and analyzed under this permit are valid and verifiable. If implemented correctly, this QAP provides the level of precision, accuracy and representativeness that yields data to help ensure that Alaska water quality standards are met and that water quality uses (public health and public resource protection) are protected.

A6. Project/Task Description

Influent, Effluent, and Receiving Water

The laboratory specified by the permittee will perform the standard tests required by this permit. See the DMR and other sampling requirements in the permit for the parameters, sample locations, sample frequency, and sample type for all self-monitoring required by the permit.

A7. Data Quality Objectives and Criteria for Measurement of Data

Project Data Quality Objectives

The data quality objective of this QAP is to ensure that the data collected and analyzed are scientifically verifiable and valid, and can be used to determine compliance with the requirements of the permit.

Criteria for Measurement of Data

Criteria for Measurements of Data are the performance criteria: the accuracy, precision, comparability, representativeness and completeness of the tests. These criteria must be met to ensure that the data are verifiable and that project data quality objectives are met.

The objectives for accuracy, precision, comparability, representativeness and completeness are summarized in this section. All results will be recorded in field and laboratory logbooks. Additional sampling and analyses will be performed when results fall outside the specified ranges and when Data Quality Objectives are not met. Any changes in Data Quality Objectives will be submitted to ADEC for approval before implementation.

(Note: The ADEC Water QA Officer keeps copies of laboratory quality management plans (QMPs) on file. These QMPs describe the laboratory measurement criteria. Therefore, quality assurance and quality control measures described in a contracted laboratory's QMP are not repeated in this document.)

Accuracy

Accuracy is a measure of confidence that describes how close a measurement is to its "true" value.

Field accuracy is ensured by field instrument calibration according to the manufacturers' instructions and by using standards and chemicals that are current (prior to expiration date), and by following proper sampling, sample handling and field analysis protocols.

Laboratory accuracy is normally determined by the percent recovery of the target analyte in spiked samples and also by the recoveries of the surrogates in all samples and QC samples. Accuracy is calculated as follows:

$$\%R = \frac{\text{Analyzed value}}{\text{true value}} \times 100$$

Laboratory accuracy ranges are specified in the contracted laboratory QMP (kept on file at ADEC) and depend on the parameter being measured. The QA Officer will ensure the facility's laboratory accuracy by meeting %R-values as shown in Table 2 below.

EPA DMR performance evaluation results are kept on file at the facility's laboratory and will be available for review by ADEC upon request.

Precision

Precision is the degree of agreement among repeated measurements of the same characteristic, or parameter, and gives information about the consistency of methods. Precision can be considered a product of the repetitiveness of monitoring.

Precision is expressed in terms of the relative percent difference (RPD) between two measurements (A and B), and is computed as follows:

$$RPD = \frac{A - B \times 100}{(A + B)/2}$$

Field precision is measured by collecting and analyzing field duplicate samples. Taking field duplicates at least every quarter ensures field precision. (See Quality Control section and Table 2).

Laboratory precision is ensured by measuring matrix spike/matrix spike duplicate (MS/MSD) samples and by the analysis of laboratory duplicate samples. The laboratory usually performs the analysis of one set of MS/MSD and duplicate samples per matrix measured. RPD is usually <20% but can vary widely depending on the analytical method. Control charts are a graphical representation showing the limits of acceptable data.

Analysts produce charts to document accuracy and precision in their testing. These charts are kept in the laboratory for data validation purposes. The Laboratory Project Manager will provide accuracy and precision records to ADEC if requested.

Representativeness

Representativeness is the extent to which measurements actually represent the true environmental condition. Representativeness of data collected was considered in the permit development process. This included sampling locations, the delineation of the mixing zone and ambient sampling water quality site selections. (See permit and/or certification for details.)

Comparability

Comparability is the degree to which data can be compared directly to similar studies. Using standardized sampling and analytical methods and units of reporting with comparable sensitivity ensures comparability. EPA-approved methods as listed in 40 CFR 136.3 will be used for standard measurements.

Completeness

Completeness is the comparison between the amount of usable data collected versus the amount of data called for in the permit or certification. Completeness will be determined by comparing sampling and analyses with the requirements in the permit.

A8. Training and Certifications

Facility laboratory personnel will be trained in sampling methods, sample handling, chain-of-custody, sample transport, and field and laboratory measurements. The Project Manager and/or the QA Officer are responsible for the training of staff who perform sampling, sample handling, and analyses activities. Records will be kept on file of these training activities and may be reviewed by ADEC.

A9. Documents and Records

Field logbooks, notebooks and/or data sheets will be filled out using "write in the rain" ink or pencil, and should not be erased. Changes must be made by crossing out errors and adding correct information. Logbooks should be bound with numbered pages.

Laboratory data results are recorded on laboratory data sheets, bench sheets and/or in laboratory logbooks for each sampling event. These records as well as control charts, logbook records of equipment maintenance records, calibration and quality control checks, such as preparation and use of standard solutions, inventory of supplies and consumables, check in of equipment, equipment parts, and chemicals are kept on file at the laboratory.

Any procedural or equipment problems are recorded along with data results. Any deviation from this QAP is noted. Additional sampling and analyses will be performed when results fall outside the specified range and when DQO's are not met. Data results returned to ADEC will include information on field and/or laboratory QA/QC problems and corrective actions.

Composite Samples

Composite samples must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow (7-9 a.m. and 6-8 p.m.). Samples will be composited directly into the sample bottles. Between composite aliquots, bottles will be kept at a temperature of 4 +/- 2°C.

The time of the initial portion of the composite, composite intervals, and the final compositing time will be noted on the field data sheets and/or in logbooks. Sample time listed on the chain-of-custody form and sample bottle will be the time of the final sample composite portion.

Cleaning

All sampling equipment and sample containers will be cleaned according to the equipment specifications or the analytical laboratory.

All glassware and plasticware cleaned in the facility's laboratory will use the following procedure unless otherwise noted:

1. Wash glassware and plasticware with phosphate-free detergent and rinse with tap water.
2. Rinse with 10% hydrochloric acid (HCl).
3. Rinse four times with deionized water.

B3. Sample Handling and Custody

Sample handling, preservation, and holding times will follow those approved by EPA in 40 CFR 136.3, as described in *Standard Methods for the Examination of Water and Wastewater, 21st Edition, 2005, or most recent edition.* Sample container, minimum sample volume, preservation, and maximum storage requirements for each parameter are listed in Table 1 below.

TABLE 1. Sample handling, preservation, and holding times.

Parameter	Container[1]	Minimum Sample Volume	Preservation[2]	Maximum Holding Time[3]
BOD_5	P, G	2.5 L	Cool, 4°C	24 hours
TSS	P, G	---[4]	Cool, 4°C	7 days
Fecal Coliform Bacteria	Sterile Plastic	500 ml	Cool, 4°C, $Na_2S_2O_3$[5]	24 hours
pH	P, G	NA	NA	Analyze immediately
Temperature (°C)	P, G	NA	NA	Analyze immediately
Dissolved Oxygen	P, G	300 ml	None Required	Analyze immediately
Total Metals (sludge)	P, G	250	Cool, 4°C	Analyze as soon as possible[5]

Parameter	Container[1]	Minimum Sample Volume	Preservation[2]	Maximum Holding Time[3]
Whole Effluent Toxicity (WET)	Plastic	4 L	Cool, 4°C	36 hours

1. Polyethylene (P) or Glass (G). Samples are normally collected in polyethylene containers to prevent breakage.
2. Sample preservation should be performed immediately upon collection. For composite chemical samples, each aliquot should be preserved at the time of collection. When use of an automated sampler makes it impossible to preserve each aliquot, then chemical samples may be preserved by maintaining at 4°C until composite sample splitting is completed.
3. Sample should be analyzed as soon as possible after collection. The times listed are maximum times that samples may be held before analysis and still be considered valid. The term "analyze immediately" usually means within 15 minutes or less of sample collection.
4. BOD_5 and TSS are tested on the same sample. 2500 mL is sufficient for both tests.
5. "As soon as possible" is not in the EPA guidance.

When samples are transferred to an outside contracted laboratory, chain-of-custody forms will be used to document the process. When samples are transferred, such transfer will be indicated on the chain-of-custody form (provided by the outside laboratory) with signature, date and time of transfer. The chain-of-custody form will remain with the samples, sealed inside the cooler, until receipt by the contracted laboratory. Samples and sample containers will be maintained in a secure environment, from the time the bottles leave the facility until the time the samples are received at the contracted laboratory. Contracted laboratories will maintain custody of bottles and samples using their normal custody procedures, as described in their QMP's.

B4. Analytical Methods

EPA-approved methods as found in *40 CFR Part 136.3* or its updates will be used (see Table 2 below). Any modifications will be discussed with ADEC and will be described in an addendum to this QAP.

Table 2. Parameters, approved methods, precision and accuracy values for analytical methods.

Parameter	Approved Test Procedures[1]	Precision (RPD)	Accuracy (% R)
BOD_5	SM 5210B	<30	80 - 120
TSS	SM 2540 D	<20	85 - 115
Fecal Coliform Bacteria	SM 9222 D	NA	NA
pH	EPA 150.1	0. 1 pH units	0. 1 pH units
Temperature	EPA 170.1	<10	90 – 110
Dissolved Oxygen	EPA 360.2 or SM4500 series	<30	85-115
Total Recoverable Metals (wastewater)	EPA 200 series or SM310 series	See specific metal	See specific metal
Sample Preparation	EPA 200.2	NA	NA
Total Metals (sludge) Sample Preparation	EPA SW-846 3050A	NA	NA

Routine maintenance for all meters will be conducted according to schedules and procedures described in manuals provided by the manufacturers and a maintenance log will be kept for each instrument.

A supply of replacement equipment and reagents is kept in the laboratory. This supply includes extras of commonly lost or broken equipment and enough reagents to perform all scheduled analysis procedures for at least three (3) months. Reagent stocks are rotated out every four to six months or according the manufacturer's recommendation.

This information will be recorded on data sheets and in laboratory logbooks and will be available to ADEC for review upon request.

B7. Instrument/Equipment Calibration and Frequency

All field and laboratory instruments and equipment are calibrated according to the manufacturers' instructions. Records of calibration dates are kept on calibration log sheets, and will be available for review by ADEC upon request.

B8. Inspection/Acceptance of Supplies and Consumables

Chemicals will be checked for expiration date, sufficient quantity, and discoloration.

All equipment, meters, kits and supplies will be checked upon receipt by the QA Officer or his/her designee to ensure that they are within technical specifications before use. Each reagent will be dated with the expiration date. An equipment/supply inspection form which includes reagent expiration dates will be completed and kept on file in the laboratory. This form will be updated each time new or replacement equipment or reagents are received, and will be available to ADEC for review upon request.

B9. Non-Direct Measurements

Not applicable.

B10. Data Management

Data will be entered onto field data sheets and into laboratory logbooks and bench sheets. The QA Officer or his designee will enter data into the EPA discharge monitoring report (DMR) form each month.

The following is a list of data information records that are kept available at the facility's laboratory for ADEC review upon request:

Training records
Field equipment and chemicals maintenance, cleaning and calibration records
Field logbooks and/or field data sheets

Chain-of-custody forms
Laboratory equipment and reagents maintenance, cleaning and calibration records
Laboratory bench sheets, control charts, SOP's
Records of QA/QC problems and corrective actions (field and/or laboratory)
Laboratory data QC records
Records of data review sheets
Duplicate, split sample, performance evaluation records and other QA/QC control records (field and laboratory)
Assessment records
Data review, verification and validation records

Whenever possible data results will be entered electronically and transferred electronically to avoid transcription errors.

Section C: Assessment and Oversight

C1. Assessments and Response Actions

The QA Officer will ensure that the field and laboratory forms are complete when he/she checks for errors. The QA Officer will compare approximately 10% of the data sheets or logbook entries with the DMR entries. If any errors are found, the QA Officer will verify correct entry by comparing another 10% of the sheets.

Should the sampling staff, laboratory personnel or QA Officer find errors in sampling or analysis, the QA Officer will notify the Project Manager and the party responsible for the error or deficiency, and will recommend methods of correcting the deficiency. The responsible party will then take action to correct the problem and will report corrections to the QA Officer and Project Manager. See above for how this information is recorded and reported.

If an EPA-approved laboratory sends the facility a water sample, which the facility's laboratory analyzes for the standard required effluent parameters, these results are sent to EPA where a performance evaluation takes place. The facility is notified whether it meets accuracy and precision requirements. Records of these performance evaluations will be available for ADEC review upon request.

The QA Officer will monitor the quarterly duplicate sampling and analysis activities and will review these results. The QA Officer will keep these assessment records available for review by ADEC.

Additionally, the facility is inspected and/or audited regularly by EPA and ADEC.

C2. Reports to Management

Monitoring results are summarized on the discharge monitoring report (DMR) and are submitted to EPA and ADEC each month, as required in the permit, (An example DMR form is found in the Appendices to the permit or at www.epa.gov.

Quarterly and Annual Assessment Reports will be submitted by the Project QA Officer to the Project Manager. Any improvements to quality assurance and/or quality control will be implemented as necessary. Records of changes will be available for ADEC review. ADEC will be notified if changes/improvements require an amended QAP.

Section D: Data Validation and Usability

D1. Data Review, Validation & Verification Requirements

The QA Officer will perform at least quarterly quality checks of data packages to detect correctable problems. Any problems noted will be immediately brought to the attention of the Project Manager. Items to be checked include data sheets, logbooks, data entry, DMRs, calibration logs, and chain-of-custody forms.

Questions to be considered during these quality checks include:

- Were correct methods used?
- Were holding times met?
- Were accuracy and precision within data quality objectives?
- Were reporting limits correct?
- Were lab qualifiers provided and explanations and corrective actions taken if there were anomalies in the data?
- Was the data package as a whole for each sampling event complete?

D2. Validation and Verification Methods

The QA Officer will check the accuracy and precision of data to ensure that data quality objectives are being met.

Data sheets and/or logbooks must be completely filled out and signed at the time of sampling and analysis. The QA Officer will review data sheets and/or logbooks for accuracy, precision, missing or illegible information, errors in calculation and values outside the expected range. The QA Officer or his designee will initial each data package upon completing this review. Any questionable data will be brought to the attention of the field and/or laboratory personnel for resolution. The QA Officer will initial any changes made to the data, and any action taken as a result of the data review will be specifically recorded on the data sheet. Data will then be entered into the monitoring data system, which is designed to flag any values that fall outside of the expected range for each parameter.

If data quality indicators do not meet specifications (see A7. Data Quality Objectives and Criteria for Measurement of Data and Table 2), the cause of the failure will be evaluated. If the cause is equipment failure, calibration and maintenance procedures will be reassessed and improved. If the problem is procedural error, the QA Officer will review methods used. If accuracy and precision goals are frequently not being met, Quality Control procedures will be reviewed and, subject to EPA and ADEC approval, may be revised.

The QA Officer or his designee will review and initial equipment maintenance logs, sample custody forms and equipment/supply inventory and inspection forms on a quarterly basis.

Verification of data accuracy will be made by the QA Officer during quarterly quality control checks, replicate analysis and split sampling checks. The QA Officer during the quarterly review process will make calculations and determinations for precision and completeness. Results of accuracy, precision, and completeness calculations will be kept on file at the laboratory.

D3. Reconciliation with User Requirements

The Project Manager and QA Officer will review the permit monitoring requirements on an annual basis. Problems with quality sampling and analysis will be discussed with ADEC to ensure that permit requirements and QAP data quality objectives are met. Modifications to monitoring required by permit will require modifications to the approved QAP.

ATTACHMENT F – Annual Report 2016

HAINES BOROUGH, ALASKA
WATER & SEWER DEPARTMENT
P.O. BOX 1209
HAINES, AK 99827
(907) 766-2200 * FAX (907) 766-3179

FEB 7 2017

January 12th, 2017

U.S. EPA Region 10
NPDES Compliance Unit
1200 Sixth Ave, Suite 900
Seattle, WA 98101

Attn: NPDES Compliance Unit, "OW-133"

Re: 2016 Annual Report and Public Education Summary Report

The Annual Report for the Haines Borough Wastewater Treatment Plant, as required under NPDES Permit #AK-002138-5, is presented Below. This report summarizes the monthly DMR data submitted regularly throughout the calendar year 2016.

2016 Annual Report

Plant Flow Summary
Plant Annual Flow 114,822,000 gallons
Daily Average Flow 314,000 gallons

Operational Summary:

The treatment plant operated normally during the year and met most Effluent Limitations, with no violations of plant effluent. Monitoring was performed in compliance with the permit.

The following permit requirements were met:

- I.A.1: Only discharge of normal waste stream was performed during the year.
- I.A.2: No floating solids, visible foam, or oily wastes which produce a sheen on the surface were discharged into the receiving water.

ICIS 2/8/17 JR

- I.A.3: pH r[illegible]ained between 6.6 and 8.5 [illegible]tandard units.
- I.A.4: Dissolved oxygen (DO) was not less than 2.0 mg/L nor greater than 17 mg/L.
- I.A.5: The permit-required effluent limits for flow, Biochemical Oxygen Demand, Total Suspended Solids, Fecal Coliform, and Copper were not exceeded.
- I.A.6: Chlorine was not added so this section does not apply.
- I.B.1: Haines Borough has a 301(h) exemption which gives EPA primacy. State water quality criteria is not applicable for this facility.
- Water quality at discharge point was evaluated through required monitoring and reported monthly on EPA Discharge Monitoring Report (DMR) Form 3320-1.
- Analyses of the effluent for toxic pollutants and pesticides was required during the first and fourth year of the permit, 2001 and 2005. These analyses were not required during 2016.
- Plant performance was monitored on a daily basis and recorded using daily, weekly, monthly, and annual reporting forms to ensure compliance.
- Influent and Effluent monitoring for TSS, BOD, and Fecals was conducted weekly to ensure compliance with the regulatory criteria of Section 301 (h) of the Clean Water Act. BOD reductions exceeding at least 30 percent were achieved throughout the year.
- There are no industrial dischargers within the Haines Borough.
- The level of bacteria concentration in near shore waters was determined through sampling as reported.

The Haines Borough is committed to ensuring proper operation of the wastewater treatment plant through regular maintenance and a compliant monitoring program. We strive to provide accurate reports on a timely basis to EPA to ensure that adequate data is available for evaluating reissuance of this permit.

Public Education Summary Report:

(Required in accordance with permit section I.E)
During 2016 Haines Borough published a quarterly advertisement advising the public what not to flush into the sewer. We also co-sponsored a household hazardous waste collection program with the State of Alaska Department of Environmental Conservation. Two Citizens Advisory documents were developed and posted in public places. One for Home Heating Oil Tank Use and

Maintenance; the other addresses how to avoid introduction of hazardous household chemicals into the sewer system. This advisory is distributed with all new service connections.

Sincerely,

Scott Bradford
Water & Wastewater Operator
Haines Borough

cc: ADEC
cc: Haines Borough

FECAL COLIFORM MONITORING 2016

Jan-16

Haines Borough NPDS Permit # AK-002138-5
Haines Alaska

Site	SAMPLE	COUNT
Garbage Point	100ml	3
Blank		0
Hay's Beach	100ml	2
Blank		0
P.C. Dock	100ml	5
Blank		0
P.C. Beach	100ml	3
Blank		0
Last Hydrant	100ml	0
Blank		0

Sewer Plant Fecals
Geomean 98994

Observations Out going tide, overcast and winds from the south

Haines Borough
Plant Operator
Scott Bradford

FECAL COLIFORM MONITORING 2016

May 31st
Haines Borough NPDS Permit # AK-002138-5
Haines Alaska

Site	SAMPLE	COUNT
Garbage Point	100ml	0
Blank		0
Hay's Beach	100ml	0
Blank		0
P.C. Dock	100ml	0
Blank		0
P.C. Beach	100ml	0
Blank		0
Last Hydrant	100ml	0
Blank		0

Sewer Plant Fecals
Geomean 495681

Weather conditions at time of samples collected:
Sunny, light winds and incoming tide.

Haines Borough
Plant Operator
Scott Bradford

FECAL COLIFORM MONITORING 2016
August 30th 2016

Haines Borough NPDS Permit # AK-002138-5
Haines Alaska

Site	SAMPLE	COUNT
Garbage Pc	100ml	1
Blank		0
Hay's Beacl	100ml	1
Blank		0
P.C. Dock	100ml	2
Blank		0
P.C. Beach	100ml	1
Blank		0
Last Hydra	100ml	0
Blank		0

Sewer Plant Fecals
Geomean 850000

Weather conditions at time of samples collected:
Partly cloudy, light winds and incoming tide.
high tide at 13:00

Haines Borough
Plant Operator
Scott Bradford

FECAL COLIFORM MONITORING 2016
November 28 2016

Haines Borough NPDS Permit # AK-002138-5
Haines Alaska

Site	SAMPLE	COUNT
Garbage Pc	100ml	2
Blank		0
Hay's Beacl	100ml	0
Blank		0
P.C. Dock	100ml	1
Blank		0
P.C. Beach	100ml	10
Blank		0
Last Hydra	100ml	2
Blank		0

Sewer Plant Fecals
Geomean 243721

Weather conditions at time of samples collected:
Cloudy light snow south winds to 10 knots
1 foot waves on shore. High tide 11:30 am

Haines Borough
Plant Operator
Scott Bradford

INV AMOUNT
685.00

CHILKAT VALLEY NEWS

AFFIDAVIT OF PUBLICATION

As office manager of the Chilkat Valley News in the State of Alaska, First Division, I, Leigh Horner do swear and affirm that the following advertisement, of which the attached is a true copy, was published in the Chilkat Valley News on the following dates:

July 14, 2016

Subscribed and sworn, this 9 day of July, 2016

Leigh Horner

FREE HOUSEHOLD HAZARDOUS WASTE COLLECTION

WHO'S ELIGIBLE: All households and government agencies. Please contact the Borough at 766-2231 for more information.

WHAT'S ELIGIBLE: Poisons, disinfectants, solvents, herbicides, used oil, flammable liquids (gasoline, diesel fuel, Blazo, etc.,) paint products, paint thinner, furniture stripper, antifreeze, acids, cleaners, pesticides, transmission fluid, wood preservatives, floor wax, printing & photographic chemicals, Ni-Cad & lithium batteries, auto batteries, and mercury.

PLEASE BRING ALL MATERIALS IN ORIGINAL CONTAINERS IF POSSIBLE!

WHAT'S *NOT* ELIGIBLE: Explosives, blasting caps and gun powder, reactives such as sodium metal, infectious wastes, radioactive wastes, light bulbs of any kind, and any item not mentioned in the eligibility list.

WHERE: New Public Works Shop Yard - North Side of Union Street between Fifth and Sixth Avenues.

WHEN: The Borough shall provide areas for the collection of household generated hazardous waste from 8:00 AM until 4:00 PM on Friday, July 22, and 8:00 AM until 12 noon on Saturday, July 23.

SPONSORED BY: The Haines Borough

HAINES BOROUGH
POSITION OPENING
Lifeguards PT, perm., union optional position. Minimum Qualifications: Red Cross Lifeguard Training/First Aid Cert. & CPR Card for the Professional Rescuer; pass pre-employment skills test. Starting wage: $12.50 to $13.50 per hr (note: wage pending union contract ratification). Get job desc. & required borough app. from Clerk, 103 S. 3rd Ave, Haines, 766-2231, jcozzi@haines.ak.us, or online at www.hainesalaska.gov. App. deadline: Open until filled. EOE. (28b)

HAINES BOROUGH
POSITION OPENING
Executive Assistant to the Borough Manager
FT, perm., union-exempt position reporting to both Borough Manager and Director of Public Facilities. Starting wage: $22.00 per hour. Get min. qualifications, job desc & required borough app from Clerk, 103 S. 3rd Ave, Haines, 766-2231, jcozzi@haines.ak.us, or online at www.hainesalaska.gov. App deadline: 5pm, 7/29/16, or thereafter until filled. EOE. (28b)

CHILKAT VALLEY NEWS

AFFIDAVIT OF PUBLICATION

As office manager of the Chilkat Valley News in the State of Alaska, First Division, I, Leigh Horner do swear and affirm that the following advertisement, of which the attached is a true copy, was published in the Chilkat Valley News on the following dates:

September 22, 2016

Subscribed and sworn, this 15 day of Oct, 2016

Leigh Horner

91.00

104.00

NOTICE

mping of non-domestic sewage into the Haines ough sewer system, including petroleum prod-, chemicals, hazardous substances and other ıting or toxic waste, is illegal and violators are ject to civil and criminal penalties.
ese substances may cause illness and/or th to sewer workers and damage to the equip-nt and pollution of marine waters.
you have any questions or if you need to pose of either household or non-domestic ardous waste, please contact:
Scott Bradford
Haines Borough
766-2200

87.50

Important Reminder! - Sign-up is required in order to give testimony during a public hearing. It's as easy as contacting the Clerk's Office ahead of time to have your

HAINES BOROUGH PUBLIC NOTICE

Seeking Letters of Interest From Borough Residents (2016 Heliskiing Map Committee)

Per Borough Code, proposals for amendments to the Commercial Ski Tour Areas map may be submitted according to a schedule. Two timely proposals were received May 31st. After amending problematic timelines in code on 9/13/16, the assembly authorized the manager to convene a 5-member advisory committee to consider these two proposals. Code provides that two members of the committee are to be chosen randomly from borough residents who petition to be members. The manager is to solicit applications by posting notice no less than ten days.

Letters of Interest will be accepted until 5:00 pm on Monday, September 26, after which two will be randomly selected.

The assembly has authorized the following timeframe for the committee, so this should be a consideration for those wishing to submit a letter of interest:

- The manager shall establish an advisory committee that shall convene no later than October 10, 2016.
- The committee shall make a recommendation to the manager on or before November 30, 2016.
- The manager shall prepare a recommendation for the assembly for consideration on December 13, 2016.

Posted 9/15/16 Julie Cozzi, MMC, Borough Clerk

LEGAL NOTICES

HAINES BOROUGH NOTICE- SEPTEMBER 22, 2016
DELINQUENT SALES TAX

DIMOK TIMBER LTD.

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According to Borough records, the above business is delinquent in [illegible] required reports and applicable sales tax through August

aines Borough Junk Sale

New Public Works Shop - North Side of ion Street between Fifth and Sixth Avenues

Monday, Sept. 26, from 8am until 3pm

eavy truck tires • slip-in sander • truck sander • brush cutter • belly blade for dump truck [illegible] parts and filters

CITIZEN'S ADVISORY FOR AVOIDING INTRODUCTION OF HAZARDOUS HOUSEHOLD CHEMICALS INTO THE SEWER SYSTEM

It is very important to everyone that hazardous household chemicals are not introduced into the sanitary sewer system in Haines. Consequences can be serious! Here is what can happen:

- You can damage your sewer pipes, Borough Lift stations, and sewage treatment plant;
- You can create a fire or explosion hazard;
- You can create health and safety risks for Borough employees and the public;
- You call kill off the good "bugs" that break down and treat the sewage;
- You can introduce hazardous chemicals into the Portage Cove ecosystem, which can threaten it, and create health risks for consumers of fish, crustaceans, and other sea life.

DO YOUR PART

If you flush or throw damaging materials down the drain, they can cause blockages and backups. Please don't put the following items in the sewer; kitty litter, egg shells, coffee grounds, motor oil, lard or cooking oil. These items should be disposed of in the garbage.

Remember...

- Use baskets or strainers in sink drains to catch food scraps and other solids...
- Scrape grease and food scraps from plates, pots and pans, utensils and grills...

- Freeze animal fats in a can and put all food waste and discards in a trash container-don't pour them down the sink, garbage disposal or toilet...
- Garbage disposals use large volumes of water and electricity-reducing or eliminating their use will lower your sewer, water, and power bills...
- Be cautious of chemicals or additives that claim to dissolve grease—these may not be effective...
- Keep fats, oil and grease out of our sewers-help keep our environment clean. Grease can build up in sewers, restricting the flow of wastewater that comes from our homes. This blockage forces wastewater up onto our streets-where it then enters the storm drain system and...
- Clogged sewer pipes on your property can also cost you a lot of money in plumbing repair bills!

Hazardous Household Wastes...

The following products are considered household hazardous chemicals and should never be flushed down the sewer:

- Pesticides, nail polish, oven cleaners, spot remover, vehicle fuel, oil or grease, fertilizer, rodent poison, weed killer, paint, varnish, stripper or thinners or battery fluids. These require disposal at a hazardous waste collection station.

Household hazardous waste consists of items such as pesticides, cleaning supplies, paint and solvents, used motor oil, antifreeze, and old gasoline. Products labeled Danger, Warning, or Caution all contain hazardous chemicals and are NOT to be put into the City sewer lines! Hazardous waste should be disposed of at the landfill operator's site in accordance their procedures and State regulations.

If you have any questions, please contact the Haines Borough Public Works Department at 766-2231.

THANK YOU FOR YOUR COOPERATION!

State of Alaska
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Prevention and Emergency Response Program

FACT SHEET
Spill Prevention for Residential Heating Oil Tanks

September 9, 1999

Proper care and maintenance of your fuel oil tank, lines, and furnace can reduce your chance of spilling oil and being faced with costly environmental problems. Fuel oil spills in residential areas can:

- contaminate drinking water wells, ground water, and soil;
- foul septic systems, requiring their replacement;
- cause odor and health problems in the home;
- contaminate stormwater drains, sewers, drainage ditches and surface water.

Each of these problems can cost thousands of dollars to correct. The following tips can help homeowners avoid costly repairs and problems associated with leaks and spills from home heating oil systems.

Inspect your tank and heating equipment before and during the heating season

- Check the condition of your tank and lines. The life of your tank depends on many variables such as the tank construction, tank installation, soil and ground water conditions, and maintenance of the tank. Inspect your tank for signs of corrosion.
- Make sure the fill cap and the vent cap are in place and tightly secured.
- Check the stability of the tank support and the ground underneath aboveground tanks. Many tanks have buckled or tipped due to instabilities and frost heaving. If you have a wooden tank stand, use only pressure treated lumber. Pressure treated 4x4's make an excellent tank cradle.
- Keep the fill pipe accessible and visible to the delivery company.
- Place oil lines between tank and furnace either under concrete or in protective tubing. Check fuel lines for crimps and replace any damaged fuel lines. Use flexible tubing if frost heaving is a problem.
- Keep all pipe connections clean and tight. Check for drips from the fittings and the filter.
- Clear snow, ice, insect nests or other debris from the tank vent to allow the tank to properly breathe.
- Is there a danger of ice or snow sliding off a roof and damaging the tank, tank stand, or exposed fuel lines?
- Look for signs of spillage near the fill and vent pipes. Stained soil and rock or distressed vegetation could indicate a fuel spill has occurred.
- Water can collect inside a tank from condensation and cause internal corrosion. Trapped water can be controlled by removing the water from a drain plug, using water absorbent socks, or periodically using additives.
- Buried tanks can corrode and leak without obvious signs on the surface. Be alert for unexplained fuel losses that might point to leakage.
- For inside tanks, be alert for signs of oil in the sump pump pit and floor drains, and for any oil smell in the basement or crawl space.
- All indoor tanks should have a vent alarm that alerts the fuel deliverer before the tank is full. When you receive oil, you can ask the deliverer to verify that the whistle is operating.

Things to consider

- Know how to properly measure your tank and calculate the volume in the tank. Determine your tank size and know when and how much to order from your delivery company.
- Don't leave your tank unattended during fuel transfers. Avoid overfills!
- Measure and monitor fuel usage and compare it to past seasons. A leaking underground fuel tank or line may cause unexplained increases in fuel consumption.
- Avoid using the area around or under the tank as a storage area. Heavy items can damage the fill or supply pipes.
- Protect fuel lines from damage by vehicles. Snowmobiles, heavy equipment, or heavy vehicle loads can damage underground lines if they are not adequately buried or protected. Aboveground fuel lines should be encased in protective tubing.
- Consider using a locking cap on the fill pipe to help prevent vandalism.
- Install a shutoff valve at the tank outlet to isolate the fuel line in case it starts to leak. If you see a leak in the line, close the valve to avoid spilling the entire tank volume.
- Do children play around the tank? Protect fuel lines so they cannot be used as handholds for children climbing on a tank.
- Consider a secondary containment area under an aboveground tank. A soil, sandbag, or timber berm with a fuel resistant liner will catch spills before they can contaminate surrounding areas.
- If you take your tank out of service, empty the tank and fuel lines completely. Abandoned tanks containing residual fuel are "accidents waiting to happen."
- If your underground tank is taking on water, a leak may be present. Your oil burner technician can check for water or provide you with a water-finding paste so you can check for yourself.

If a spill does occur

Accidents can happen, despite your best efforts to prevent them. In the event of a spill, the main priorities should be stopping the flow of oil at its source and containing the oil that has spilled. This will help minimize the impact to the environment and to your property and that of your neighbors. In most cases, cleanup consists of the removal and disposal of any contaminated soils or other media and repair or replacement of leaking tanks and/or fuel lines. Technical assistance is available from ADEC Prevention and Emergency Response Program staff, who may be contacted at one of the Area Response Team Offices listed below.

Homeowners are liable under State law for the cleanup of spills from home heating oil tanks on their property. Sometimes homeowner insurance policies cover accidental spills from home heating oil tanks. Many policies, however, specifically exclude such pollution problems. Check with your agent to find out if you're covered.

Any spill of oil greater than one gallon to land or any amount to water should be reported to ADEC. Fuel deliverers who discover an existing spill or contamination on a homeowner's property should inform the homeowner so that he or she can take steps to correct the situation.

For more information on spill prevention, cleanup, and reporting requirements, consult the ADEC Prevention and Emergency Response Program website at http://www.state.ak.us/dec/dspar/perp/perphome.htm or contact program staff at one of the Area Response Team Offices listed below.

Anchorage
Phone: 269-3063
Fax: 269-7648

Fairbanks
Phone: 451-2121
Fax: 451-2362

Juneau
Phone: 465-5340
Fax: 465-2237

- Outside normal business hours, call: 1-800-478-9300

Additional information on aboveground and underground heating oil tank requirements is available via the ADEC Storage Tank Program website at http://www.state.ak.us/dec/dspar/stp_home.htm.

HHO factsheet.doc